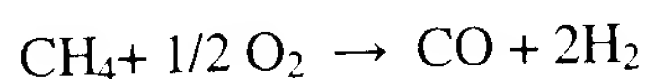


Please cancel claim 13.

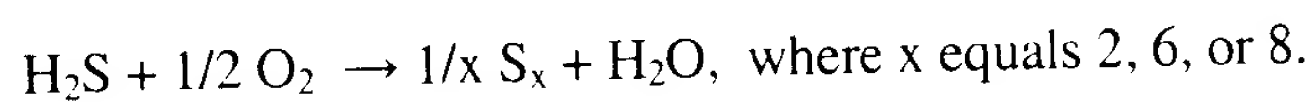
Please add the following new claims 21-28:

21. (New) The system of claim 8 comprising, in sequence:  
a synthesis gas reactor having a light hydrocarbon gas inlet, an O<sub>2</sub> inlet and an H<sub>2</sub>S inlet,  
a firetube boiler,  
a sulfur condenser,  
a heater, and  
a tailgas cleanup unit.
22. (New) The system of claim 21 further comprising, in sequence, a cooler for receiving product gas from said tailgas cleanup unit, and a quench tower.

23. (New) The system of claim 8 wherein said catalyst is active for catalyzing the reactions



and



24. (New) The system of claim 14 wherein said cooling zone comprises a sulfur condenser.

25. (New) The system of claim 15 wherein said tailgas processing unit comprises a sulfur absorbing material.

26. (New) An apparatus for producing synthesis gas and elemental sulfur, the apparatus comprising:

means for effecting both the catalytic partial oxidation of a light hydrocarbon to form CO and H<sub>2</sub> products and the catalytic partial oxidation of H<sub>2</sub>S to elemental sulfur and H<sub>2</sub>O in a single reaction zone of a short contact time reactor, whereby a stream of product containing CO, H<sub>2</sub>, H<sub>2</sub>O and elemental sulfur is produced;

means for maintaining the temperature of said reaction zone above the dew point of sulfur,

means for cooling said product stream below the dewpoint of sulfur;